

Goose, Curlews, White Owls, and Egrets," at the foot of Lake Erie and on Niagara River (p. 35).

Each number of the Bulletin has a department of 'Ornithological Notes,' which, with one exception, are from the pen of Mr. Fish. (For further reference to these see 'Minor Ornithological Publications' in this number of 'The Auk,' Nos. 595-607.)

Minor Ornithological Publications.—Volume III* of the 'Canadian Sportsman and Naturalist' contains the following (Nos. 523-543):—

523. [*Birds of Western Ontario.*] By T. McIlwraith. *Ibid.*, III, pp. 198-200, 207.—Remarks on various species, with a comparison of the Hamilton and London lists. In all 260 species have been observed. (See also *antea*, p. 85).

524. *Ornithological Notes.* By Ernest D. Wintle. *Ibid.*, III, p. 200.—A pair of White-bellied Swallows lay 13 eggs; Catbirds laying spotted eggs; "two species of Crow Blackbird in Canada," but the supposed occurrence of *Quiscalus major* is doubtless erroneous, as stated by Everett Smith (*Ibid.*, III, p. 207). (See below, No. 526.)

525. *The Wood-thrushes (Hylocichla) of New Brunswick.* By M. Chamberlain, St. John, N. B. *Ibid.*, III, pp. 201-203.—(Previously published in the 'Ornithologist and Oölogist,' VII, pp. 185-187.)

526. *Crow Blackbird.* By Everett Smith. *Ibid.*, III, p. 207.—The Boat-tailed Grackle not yet taken in Canada. (See *antea*, No. 524.) On page 208 W. E. Saunders and W. W. Dunlop, under the same caption, write to the same effect.

527. *List of Birds ascertained to occur within ten miles from Point de Monts. Province of Quebec, Canada; based chiefly upon notes of Napoleon A. Comeau.* By C. Hart Merriam, M. D. *Ibid.*, III, pp. 208-212.—(From Bull. Nutt. Orn. Club, VII. Oct. 1882.)

528. *The Hudsonian Chickadee. (Parus hudsonicus.)* By Montague Chamberlain. *Ibid.*, III, pp. 215-217.—Biography of the species.

529. *Birds of Western Ontario.* By John M. Morden. *Ibid.*, III, p. 216.—On *Lanius borealis*, *Regulus calendula*, and *Circus hudsonius*. Supposed young of former, taken near Hyde Park, doubtless were *L. ludovicianus*.

530. *Notes on the breeding of the Red-headed Duck at Lake St. Clair.* By John M. Morden. *Ibid.*, III, pp. 218, 219.

531. *Notes on the Natural History of Manitoba.* By W. G. A. Brodie. *Ibid.*, III, pp. 221-224.—Contains notes on about 80 species of birds.

532. *New Brunswick Notes. Loon. (Colymbus torquatus.)* By Montague Chamberlain. *Ibid.*, III, p. 231.

533. *The Wild or Passenger Pigeon. Ectopistes migratorius.* By J. M. LeMoine. *Ibid.*, III, p. 231.—Notes on its abundance prior to 1850, about Quebec and Montreal.

* Volume III, as here indexed, is incomplete, the number for September, 1883, being the last that has reached us, or that we have heard of as published up to the present writing (March 1, 1884).

[Since writing the foregoing other numbers have come to hand. Respecting this publication see 'Notes and News' in this number of 'The Auk.']

534. *The Logger-head Shrike. Lanius ludovicianus, Linn.* Editorial. *Ibid.*, III, pp. 232-236, 243, 244.—Consists mainly 'Of Shrikes in a State of Nature,' from Coues's 'Birds of the Colorado Valley.'

535. *The Cow Bird. Molothrus ater* Bodd. By W. W. Dunlop. *Ibid.*, III, pp. 240, 241.—Its habits.

536. *Notes on the Red-shouldered Hawk.* By John A. Morden. *Ibid.*, III, pp. 241, 242.

537. *The Passenger Pigeon.* By W. H. Rintoul. *Ibid.*, III, pp. 242, 243.—Nesting of the species in great numbers near Altona, N. Y., in 1867 and 1868.

538. *The Ornithology of Western Ontario.* By John A. Morden and W. E. Saunders. *Ibid.*, p. 243.—Admits the erroneous character of a record of the breeding there of *Lanius borealis*, and notes the capture of *Machetes pugnax* and *Sterna cantiaca*.

539. *M. Dionne's "Les Oiseaux du Canada."* By Montague Chamberlain. *Ibid.*, III, pp. 248-251.—A critical review of the work.

540. *Ornithological Notes.* By John A. Morden. *Ibid.*, III, pp. 254, 255.—On the nesting of *Helminthophaga chrysoptera* near Hyde Park, Ont.

541. *Insectivorous Grouse.* By C [=W. Cooper]. *Ibid.*, III, p. 261.—A specimen of the Ruffed Grouse (*Bonasa umbellus*) found to have "its crop full of caterpillars of *Notodonta concinna*, commonly known as the Red-humped apple tree caterpillar."

542. *Ornithologist's Convention.* Editorial. *Ibid.*, III, pp. 261, 262.—Brief account of the founding of the A. O. U.

543. *Notes on the Natural History of Labrador.* By W. A. Stearns. *Ibid.*, III, pp. 266-268. (From the Proc. U. S. Nat. Mus. Vol. VI, No. 8.)

The 'American Field' (Volumes XVII-XX, Jan. 1882-Jan. 1884), contains, beside articles reprinted from the 'American Naturalist' and other sources, the following notes and articles (Nos. 544-569):—

544. *American Pipit.*—*Tit-Lark.*—(*Anthus ludovicianus.*) By W. A. Stearns. *American Field*, XVII, No. 2, p. 35, Jan. 7, 1882.—Notice of its habits as observed by the writer in Labrador.

545. *The Snowy Owl [at Algona, Iowa].* By J. G. Smith. *Ibid.*, XVII, No. 3, p. 52.

546. *Young Quails in March [at Mechanicsburg, Ohio].* By S. M. Harper. *Ibid.*, XVII, No. 3, p. 52.

547. *Migratory Hawks.* By Polk Miller. *Ibid.*, XVII, No. 3, p. 52.—"A flock of from 250 to 500 hawks" seen Sept. 18, 1881, near White Sulphur Springs, Va.

548. *The Migratory Quails.* By Everett Smith. *Ibid.*, XVII, No. 8, p. 132, Feb. 18, 1882.—On their introduction into Maine.

549. *Those Wicked Pugnacious Rogues of Sparrows.* By Philip Vibert. *Ibid.*, XVII, No. 12, p. 187, March 18, 1882. (Marked "To be continued.")

550. *A Request.* By W. W. Cooke. *Ibid.*, XVIII, No. 22, p. 360. Nov. 25, 1882.—A call upon ornithologists to coöperate in collecting data on the migration, nesting, etc., of the birds of the Mississippi Valley.

551. *Effects of Reversion to the Wild State in our Domestic Animals.* By Hon. J. D. Caton, LL. D. *Ibid.*, No. 24, pp. 390, 391, Dec. 9, 1882.—Includes notices of Domestic Turkeys occurring in a wild state in the Hawaiian Islands.

552. *Observations on the Development of Special Senses.* By Hon. John Dean Caton, LL. D. *Ibid.*, No. 25, p. 411, Dec. 16, 1882.—Includes references to the sense of smell in Ducks, Geese, the Wild Turkey, and Turkey Buzzard. (From 'Journ. of Comp. Med. and Surgery'.)

553. *Do Birds Possess the Sense of Smelling.* By G. D. Alexander. *Ibid.*, XIX, No. 4, p. 72, Jan. 27, 1883.

554. *Wilson's Snipe.* By J. H. L. (Buffalo, N. Y.). *Ibid.*, XIX, No. 6, pp. 112, 113. Feb. 10, 1883.—On the habits of *Gallinago wilsoni*.

555. *The Sense of Smell in Birds.* By Walter S. Heffron. *Ibid.*, XIX, No. 6, p. 113.—Mainly extracts from Sir Samuel Baker's 'The Nile Tributaries of Abyssinia.'

556. *The Sense of Smell in Birds.* By S. M. Harper. *Ibid.*, XIX, No. 10, p. 174, March 10, 1883.—Relates mainly to the Turkey Buzzard.

557. *The Sense of Smell in Birds.* By W. J. D. (Cimarron, Kan.) *Ibid.*, XIX, No. 11, p. 195, March 17, 1883.—Relates to the Wild Turkey, which the writer believes can smell.

558. *The Hills and Streams of Southern California.* By T. S. Van Dyke . . . Chapter X. *The Black Brant.* *Ibid.*, XIX, No. 13, March 31, 1883, pp. 226, 227.—Its habits and abundance in the bays south of San Diego.

559. *Geographical Variation in Size in Birds.* By Everett Smith. *Ibid.*, XIX, No. 18, p. 349.—Cites as instances of *decrease* in size *northward* various species of Loons, Ducks, and the Herring Gull. States that his own observations on not only birds, but animals and fishes, have convinced him that there is one universal rule of variation, which has been given by J. A. Allen, as follows: "The maximum physical development of the individual is attained where the conditions of environment are most favorable to the life of the species."

560. *Unnatural Attachments among Animals.* By John Dean Caton, LL.D. *Ibid.*, XIX, No. 20, May 19, 1883, pp. 396, 397.—Sand-hill Cranes and Hawaiian Geese in confinement forming an attachment for pigs.

561. *The Black Brant* [*Bernicla nigricans*]. By W. A. P. *Ibid.*, XIX, No. 21, May 26, 1883, p. 419.—Its abundance on the coast of Alaska.

562. *The Goatsuckers.* (*Caprimulgidae*). By Col. A. G. Brackett. U. S. Army. *Ibid.*, XIX, No. 23, p. 469, June 9, 1883.

563. *The Wood Duck*—(*Aix sponsa*). By Byrne. *Ibid.*, XX, No. 1, July 7, 1883, p. 9.—Original and interesting account of its habits.

564. *Our Goatsuckers.* By Kit Killbird (pseudon.). *Ibid.*, XX, No. 7, Aug. 18, 1883, p. 153.—In correction of certain misstatements by Audubon and by Col. Brackett.

565. *Roseau Lake.—The Breeding Grounds of the Geese and Ducks.*

By Charles Hallock. *Ibid.*, XX, No. 10, Sept. 8, 1883, pp. 220, 221.—Canada Geese, Red-heads, and Mallards “breed there by myriads.” Their breeding haunts described.

566. *Our Goatsuckers and Opossums.* By R. *Ibid.*, No. 11, Sept. 15, 1883, p. 249.—Defence of Audubon against “Kit Killbird,” respecting the breeding of the Night Hawk in Louisiana.

567. *The Length of Time a Quail sits.* By R. T. C. *Ibid.*, XX, No. 13, p. 298.—Found to be twenty-one days.

568. *The Power of Flight.* By Charles Codman. *Ibid.*, XX, No. 17, p. 394.—“Electricity” believed “to be the sustaining power by which a bird flies”!

569. *Bird Migration.* By W. W. Cook and Otto Widmann. *Ibid.*, XX, Nos. 22, 23, 24, 25, 26, pp. 513, 514, 536, 537, 560, 561, 584, 585, 610, 611. (Continued in Vol. XXI.)—A detailed record of observations made at Jefferson, Wisc., and St. Louis, Mo., begun Jan. 1, 1883, and continued through the spring migration.

‘Science,’ Vols. I and II, 1883, contains the following:—

570. *Cleaning Birds.* By J. Amory Jeffries. *Science*, Vol. I, No. 1, p. 11.

571. *Domestic ducks that fly abroad like pigeons.* By F. H. Storer. *Ibid.*, No. 2, p. 67.

572. *A caterpillar-eating hen-hawk* [*Buteo pennsylvanicus*]. By F. H. Storer. *Ibid.*, No. 6, p. 168.

573. *Domestic ducks that fly abroad like pigeons.* By Joseph LeConte. *Ibid.*, No. 9, p. 249.

574. *Intelligence of the crow.* By S. Kneeland. *Ibid.*, No. 13, p. 359.—On Crows carrying stones into the air in their claws and dropping them upon intruders.

575. *The least Bittern in Newfoundland.* By C. Hart Merriam. M. D. *Ibid.*, No. 16, p. 457.

576. *Robins, sparrows and earth-worms.* By F. H. Storer. *Ibid.*, No. 16, pp. 457, 458.—English Sparrows stealing worms from Robins.

577. *Intelligence of the crow.* By Jos. M. Wade. *Ibid.*, No. 16, p. 458.—Tame Crows and Ravens observed to use their beaks and not their claws in transporting objects.

578. *Intelligence of the crow.* By J. A. Allen. *Ibid.*, No. 18, p. 513.

579. *Precocity in a chicken.* By Reddus. *Ibid.*, No. 20, p. 574.

580. *Intelligence of the crow.* By C. C. Abbott. *Ibid.*, No. 20, p. 576.—Carrying mussels into the air in their beaks and dropping them on stones.

581. *Impregnation in the turkey.* By Edward M. Shepard. *Ibid.*, No. 20, p. 576.—Young^h hatched from eggs laid in confinement without any connection of the female with a Turkey-cock.

581 bis. *Impregnation in the turkey.* By W. Mann. *Ibid.*, Vol. II, No. 25, p. 105.—One connection with a male bird found to be sufficient to impregnate a whole clutch of eggs.

582. [*Absence of*] *Swallows in Boston.* By Carl Reddus. *Ibid.*, No. 26, p. 135.

583. *Change of bird's notes.* By F. O. Jacobs. *Ibid.*, No. 27, p. 167.—Cardinal Bird imitating the notes of the Whippoorwill.
584. *Trick of the English sparrow.* By F. H. Herrick. *Ibid.*, No. 28, p. 201.—Ousting Eaves-Swallows from their nests and appropriating them.
585. *Occurrence of the swallow-tailed hawk in New Jersey.* By C. C. Abbott. *Ibid.*, No. 29, p. 222.
586. *A reckless flier.* By F. H. Herrick. *Ibid.*, No. 29, p. 222.—A Chimney Swift impales itself on the spear point of a lightning-rod above a chimney.
587. *Swallows in Boston.* By Carl Reddotts and Leander Wetherell. *Ibid.*, No. 29, p. 222.—First seen in 1883 about August 4.
588. *Prehensile feet of the crow.* By S. Kneeland. *Ibid.*, No. 30, pp. 265, 266.—Instances adduced of Crows using their feet, as well as their bills, in seizing and carrying objects.
589. [*Breeding of the*] *Prairie Warbler in New Hampshire.* By F. H. Herrick. *Ibid.*, No. 31, p. 309.
590. *Do humming-birds fly backward?* By Bradford Torrey. *Ibid.*, No. 34, p. 436.—Answered affirmatively.
591. *Sternal processes in Gallinae.* By J. Amory Jeffries. *Ibid.*, No. 40, p. 622.
592. *Remarks upon the osteology of phalacrocorax bicristatus.* By R. W. Shufeldt. *Ibid.*, No. 41, pp. 640-643, figg. 1-3.
593. *Osteology of the cormorant.* By J. Amory Jeffries. *Ibid.*, No. 44, p. 739.—A criticism on some points in the article last cited.
594. *Osteology of the cormorant.* By R. W. Shufeldt. *Ibid.*, No. 47, p. 822.—A brief reply to the last.
595. *Nesting Habits of Birds.* By E. E. Fish. *Bulletin of the Buffalo Naturalists' Field Club*, I, 1883, pp. 13-17.—Interesting notes on various species.
596. *Generosity of Birds.* By E. E. F[ish]. *Ibid.*, p. 45.
597. *Birds Making Mistakes.* By E. E. F[ish]. *Ibid.*, pp. 45, 46.
598. *Cow Bunting.* By E. E. F[ish]. *Ibid.*, p. 46.—A pair of Song Sparrows observed feeding two nestling Cow Buntings.
599. [*English Sparrow playing 'Possum*]. By E. E. Fish. *Ibid.*, No. 3, p. 70.
600. [*Small Complements of Eggs of early nesting Birds in Spring of 1882.*] By E. E. F[ish]. *Ibid.*, pp. 70-71.
601. [*Robins Destroying their own Young during Severe Weather.*] By E. E. F[ish]. *Ibid.*, p. 71.
602. *Early Nesting of the Shore Lark.* By E. E. F[ish]. *Ibid.*, p. 71.
603. [*Early Appearance of the Robin.*] By D. S. K[ellicott]. *Ibid.*, p. 71.
604. [*The Red-headed Woodpecker (Melanerpes erythrocephalus) a Robber of other Bird's Nests.*] By E. E. F[ish]. *Ibid.*, No. 4, p. 92.
605. *Yellow-throated Warbler.* By E. E. F[ish]. *Ibid.*, p. 93.

606. *Habits of the Scarlet Tanager*. By E. E. Fish. *Ibid.*, No. 5, pp. 118-119.

607. *Sagacity of the Chipping Bird*. By E. E. Fish. *Ibid.*, p. 119.

608. *Der Walddrossel*. (*Turdus mustelinus* Gmelin.—*Wood Thrush*.) Von H. Nehrling, *Sonntagsblatt der N. Y. Staats Zeitung*, 20 Jan. 1884. —Biography of the species.

Publications Received. — Ridgway, Robert. Notes upon some Rare Species of Neotropical Birds. (*Ibis*, Oct. 1883.)

Stearns, W. A. Notes on the Natural History of Labrador. (*Proc. U. S. Nat. Mus.*, 1883.)

Lawrence, George N. Description of new Species of Birds of the Genera *Chrysotis*, *Formicivora*, and *Spermophila*. (*Ann. N. Y. Acad. Sci.*, II, No. 12, 1883.)

Jouy, Pierre Louis. Ornithological Notes on Collections made in Japan from June to December, 1882. (*Proc. U. S. Nat. Mus.*, 1883.)

Fischer, Dr. G. A. and Dr. Ant. Reichenow. Neue Vogelarten aus dem Massailand (Inneres Ostafrika). (*Journ. f. Orn.*, 1884.)

Cooke, W. W. and Otto Widmann. Bird Migration in the Mississippi Valley. (*Bull. Ridgway Orn. Club*, No. 1, 1883.)

Swinburne, John. Notes on the Islands of Sula Sgeir, or North Barra and North Rona, with a list of the Birds Inhabiting them. (*Proc. Roy. Phys. Soc. Edinb.*, VIII.)

Zoölogist, Jan., Feb., March, 1884.

American Naturalist, Feb., March, April, 1884.

Ornithologist and Oölogist, Feb., March, 1884.

Random Notes on Natural History, Nos. I, II, Jan., Feb., 1884.

Quarterly Journal of the Boston Zoölogical Society, Vol. II, Dec. 1883; Vol. III, Jan., Feb., 1884.

Canadian Sportsman and Naturalist, Nos. 11 and 12, Vol. III, 1883.

Proceedings of the Boston Society of Natural History at its Annual Meeting, May 2, 1883.

Proceedings of the Academy of Natural Sciences of Philadelphia, Part II, 1883.

Proceedings of the Natural History Society of Glasgow, Vol. V, pt. II, 1884.

Annual Book of the Michigan Sportsman's Association, 1881 and 1883.

GENERAL NOTES.

A singular specimen of the Black-and-white Creeper.—The Essex County Collection (mounted) of the Peabody Academy of Science at Salem, Mass., contains a peculiar Black-and-white Creeper which Mr. Robinson, Curator of the Academy, has kindly allowed me to examine and describe.